Supplementary materials

Field Study on the Emission Characteristics of Micro/Trace Pollutants and Their Correlations from Medical Waste Incineration

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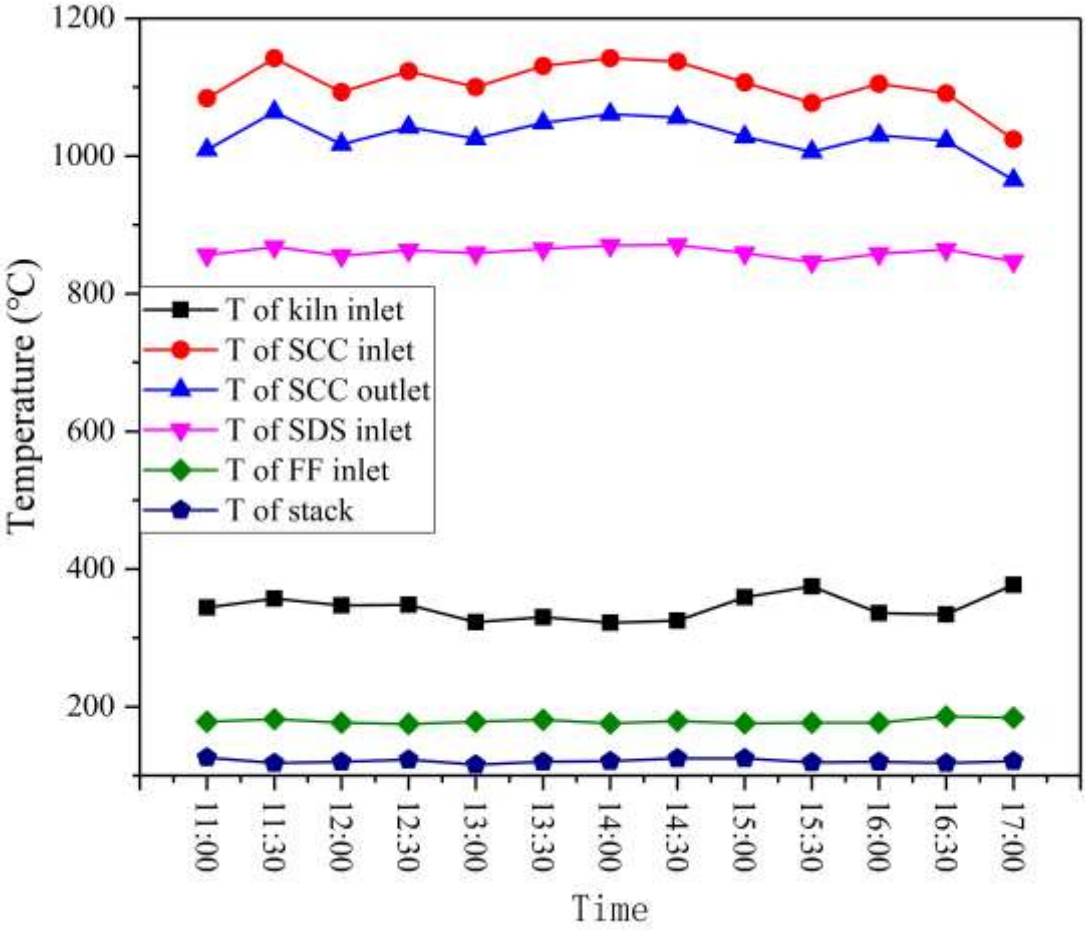

Figure S1. The operation temperatures of different sites (℃) (T represents average temperature).

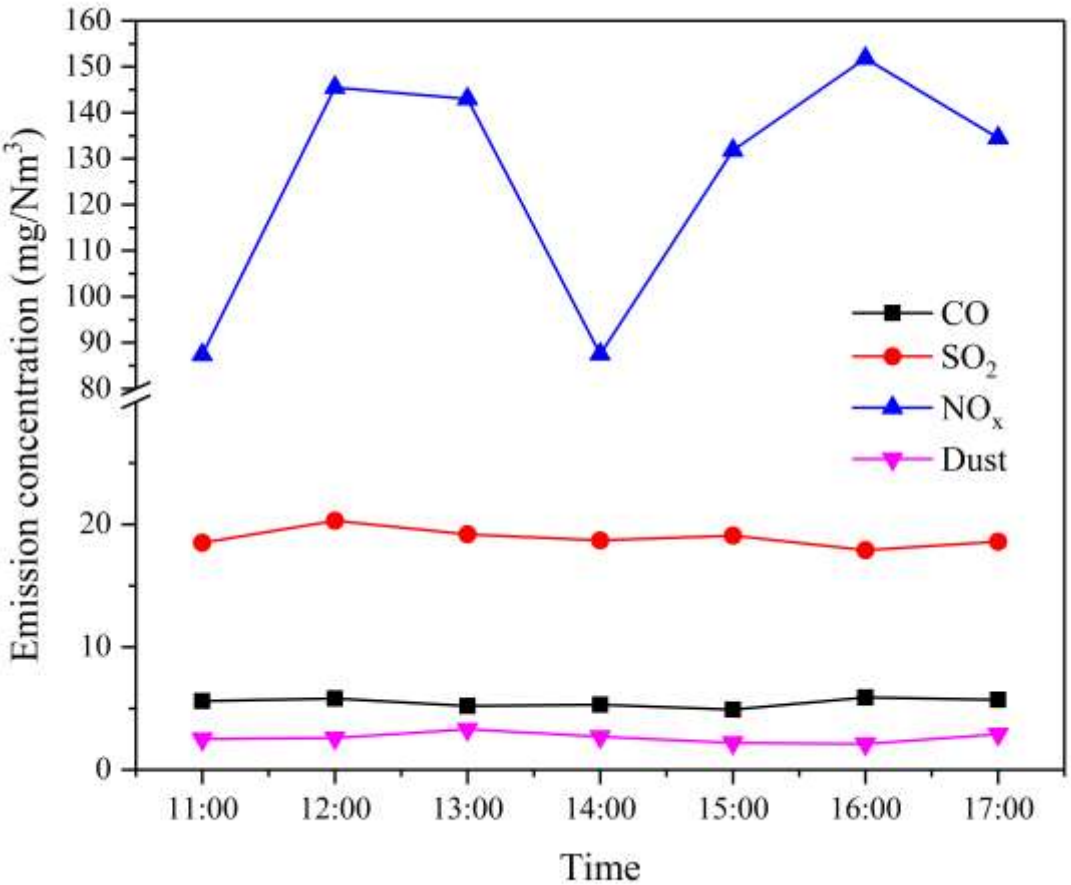

Figure S2. The emission concentrations of conversional pollutants (mg/Nm^3).

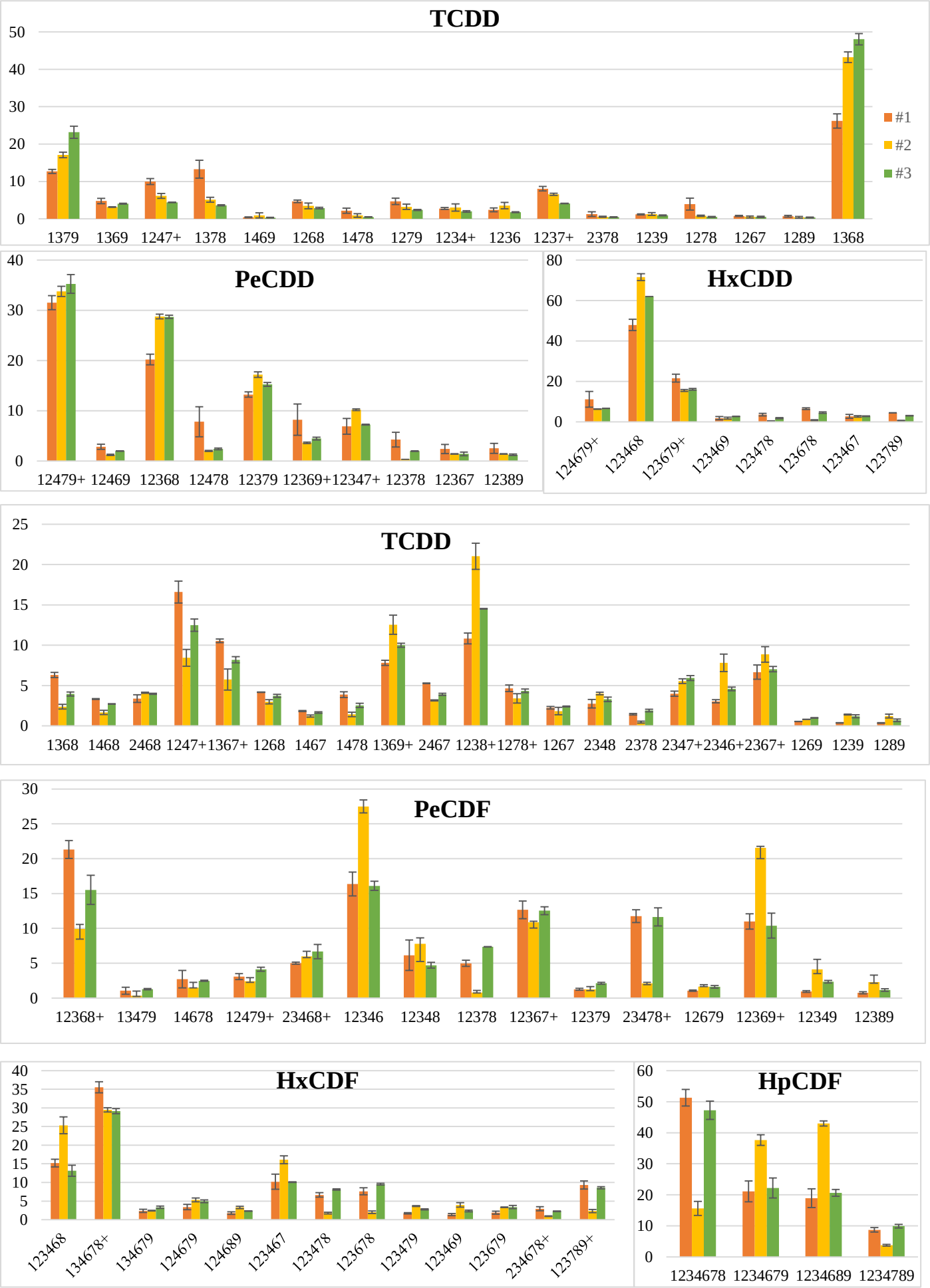

Figure S3. The distribution of PCDD/F-isomers in different sampling sites (%).

Table S1. The removal efficiency (%) of PCDD/F congeners and homologues (ng/Nm^3) (RE_{FF} represents PCDD/F removal efficiency of fabric filter coupled with active carbon injection, RE_{WS} represents PCDD/F removal efficiency of wet scrubber).

Isomer	#1	#2	#3		RE_{FF}	RE_{WS}	RE_{APCD}
TCDD							
1379	0.3599	0.1321	0.2259		63.28	-70.93	37.23
1369	0.1325	0.0241	0.0394		81.83	-63.75	70.25
1247+1248+1246+1249	0.2790	0.0454	0.0429		83.73	5.61	84.64
1378	0.3670	0.0377	0.0353		**89.74**	6.19	90.37
1469	0.0116	0.0054	0.0031		53.24	43.71	73.68
1268	0.1310	0.0247	0.0281		81.16	-13.85	78.55
1478	0.0592	0.0057	0.0048		**90.34**	16.81	91.97
1279	0.1297	0.0230	0.0232		82.26	-0.76	82.12
1234+1269	0.0789	0.0211	0.0194		73.22	8.07	75.38
1236	0.0688	0.0253	0.0173		63.32	31.60	74.91
1237+1238	0.2254	0.0493	0.0400		78.13	18.82	82.24
2378	0.0330	0.0030	0.0044		**90.75**	-45.83	86.51
1239	0.0331	0.0089	0.0090		73.20	-1.36	72.84
1278	0.1063	0.0059	0.0051		**94.43**	13.05	95.16
1267	0.0211	0.0034	0.0053		84.02	-56.39	75.01
1289	0.0195	0.0027	0.0034		86.30	-25.73	82.77
1368	0.7633	0.3439	0.4688		54.94	-36.33	38.58
PeCDD	**#1**	**#2**	**#3**		RE_{FF}	RE_{WS}	RE_{APCD}
12479+12468	1.1783	0.4553	0.2231		61.36	50.99	81.06
12469	0.0927	0.0165	0.0127		82.17	22.87	86.25
12368	0.7843	0.3873	0.1821		50.62	52.98	76.78
12478	0.2547	0.0272	0.0153		**89.31**	43.87	94.00
12379	0.4858	0.2314	0.0969		52.38	58.10	80.05
12369+12467+12489	0.2682	0.0490	0.0286		81.73	41.70	89.35
12347+12346	0.2668	0.1378	0.0461		48.36	66.57	82.74
12378	0.1308	0.0048	0.0127		**96.36**	-166.22	90.32
12367	0.0782	0.0192	0.0092		75.47	52.16	88.27
12389	0.0817	0.0190	0.0080		76.68	58.00	90.21

HxCDD	#1	#2	#3		RE_{FF}	RE_{WS}	RE_{APCD}
124679+124689	0.4728	0.1425	0.0362		69.87	74.61	92.35
123468	2.3933	1.6175	0.3336		32.42	79.38	86.06
123679+123689	0.9204	0.3469	0.0872		62.31	74.85	90.52
123469	0.0765	0.0389	0.0148		49.11	62.09	80.71
123478	0.1487	0.0096	0.0101		**93.55**	-5.65	93.19
123678	0.2931	0.0155	0.0248		**94.71**	-60.36	91.52
123467	0.1174	0.0585	0.0155		50.14	73.52	86.80
123789	0.1949	0.0134	0.0168		**93.13**	-25.84	91.36
HpCDD	**#1**	**#2**	**#3**		**RE_{FF}**	**RE_{WS}**	**RE_{APCD}**
1234679	1.3825	0.8842	0.2449		36.04	72.31	82.29
1234678	1.1407	0.0911	0.1519		**92.01**	-66.66	86.68
OCDD	**#1**	**#2**	**#3**		**RE_{FF}**	**RE_{WS}**	**RE_{APCD}**
12346789	1.6746	0.1352	0.3257		**91.93**	-140.96	80.55
TCDF	**#1**	**#2**	**#3**		**RE_{FF}**	**RE_{WS}**	**RE_{APCD}**
1368	0.7012	0.0471	0.0447		93.28	5.16	93.63
1468	0.3677	0.0327	0.0307		91.11	6.10	91.65
2468	0.3658	0.0862	0.0447		76.44	48.08	87.77
1247+1347+1378+1346+1246	1.8538	0.1678	0.1409		90.95	16.00	92.40
1367+1348+1379+1248	1.1680	0.1093	0.0925		90.64	15.43	92.08
1268	0.4616	0.0645	0.0418		86.03	35.16	90.94
1467	0.2034	0.0244	0.0186		87.99	23.88	90.86
1478	0.4328	0.0274	0.0288		**93.67**	-4.91	93.35
1369+1237	0.8687	0.2786	0.1123		67.93	59.67	87.07
2467	0.5837	0.0651	0.0442		88.85	32.14	92.44
1238+1236+1469+1678+1234+2368	1.1449	0.4255	0.1633		62.84	61.61	85.73
1278+1349	0.5203	0.0663	0.0487		**87.25**	26.56	90.64
1267	0.2513	0.0346	0.0271		86.25	21.70	89.23
2348	0.2957	0.0848	0.0369		71.32	56.56	87.54
2378	0.1615	0.0064	0.0213		**96.06**	-235.13	86.81
2347+1279	0.4445	0.1178	0.0670		73.49	43.14	84.93
2346+1249	0.3327	0.1793	0.0514		46.10	71.31	84.54
2367+3467	0.7489	0.1924	0.0789		74.31	58.99	89.46

1269	0.0606	0.0168	0.0112	72.35	33.16	81.52
1239	0.0409	0.0288	0.0132	29.74	54.04	67.71
1289	0.0409	0.0271	0.0075	33.88	72.19	81.61
PeCDF	**#1**	**#2**	**#3**	**RE_{FF}**	**RE_{WS}**	**RE_{APCD}**
12368+13478+12478	1.2921	0.1381	0.0857	**89.31**	37.97	93.37
13479	0.0660	0.0047	0.0070	92.95	-51.22	89.33
14678	0.1699	0.0215	0.0138	**87.37**	35.86	91.90
12479+13469	0.1864	0.0347	0.0228	81.38	34.21	87.75
23468+12469+12347	0.2988	0.0851	0.0368	71.52	56.75	87.68
12346	0.9647	0.3943	0.0894	59.12	77.33	90.73
12348	0.3520	0.1053	0.0260	70.08	75.27	92.60
12378	0.3010	0.0105	0.0409	**96.50**	-288.63	86.42
12367+12678	0.7629	0.1532	0.0694	79.92	54.69	90.90
12379	0.0757	0.0175	0.0118	76.93	32.70	84.47
23478+12489	0.6832	0.0277	0.0650	**95.94**	-134.31	90.49
12679	0.0637	0.0235	0.0090	63.08	61.72	85.86
12369+23467	0.6680	0.3156	0.0580	52.75	81.64	91.32
12349	0.0550	0.0602	0.0130	-9.34	78.37	76.36
12389	0.0455	0.0331	0.0064	27.23	80.54	85.84
HxCDF	**#1**	**#2**	**#3**	**RE_{FF}**	**RE_{WS}**	**RE_{APCD}**
123468	1.1843	0.3758	0.0656	68.26	82.54	94.46
134678+124678	2.8442	0.4300	0.1485	**84.88**	65.47	94.78
134679	0.1908	0.0352	0.0176	81.54	50.11	90.79
124679	0.2731	0.0762	0.0259	72.08	66.09	90.53
124689	0.1425	0.0474	0.0119	66.73	74.95	91.66
123467	0.8171	0.2318	0.0518	71.63	77.65	93.66
123478	0.5289	0.0258	0.0427	**95.13**	-65.62	91.93
123678	0.5968	0.0285	0.0503	**95.23**	-76.67	91.57
123479	0.1378	0.0530	0.0144	61.51	72.93	89.58
123469	0.1108	0.0563	0.0124	49.21	77.98	88.82
123679	0.1514	0.0487	0.0180	67.85	63.08	88.13
234678+123689	0.2171	0.0140	0.0117	**93.55**	16.05	94.59
123789+123489	0.7067	0.0331	0.0452	**95.32**	-36.58	93.60

HpCDF	#1	#2	#3		RE_{FF}	RE_{WS}	RE_{APCD}
1234678	1.6949	0.0602	0.0932		**96.45**	-54.74	94.50
1234679	0.7001	0.1462	0.0452		79.12	69.10	93.55
1234689	0.6283	0.1668	0.0409		73.46	75.46	93.49
1234789	0.2718	0.0146	0.0191		**94.63**	-30.74	92.97
OCDF	**#1**	**#2**	**#3**		RE_{FF}	RE_{WS}	RE_{APCD}
12346789	0.6702	0.0253	0.0534		96.23	-111.27	92.03
Homologues	**#1**	**#2**	**#3**		RE_{FF}	RE_{WS}	RE_{APCD}
TCDD	2.82	0.76	0.98		72.99	-28.06	65.40
PeCDD	3.62	1.35	0.63		62.79	52.90	82.47
HxCDD	4.62	2.24	0.54		51.42	75.97	88.33
HpCDD	2.52	0.98	0.40		61.35	59.32	84.28
OCDD	1.67	0.14	0.33		91.93	-140.96	80.55
TCDF	11.05	2.08	1.13		81.15	45.95	89.81
PeCDF	5.98	1.43	0.56		76.19	61.05	90.73
HxCDF	7.90	1.46	0.52		81.57	64.56	93.47
HpCDF	3.30	0.39	0.20		88.23	48.84	93.98
OCDF	0.67	0.03	0.05		96.23	-111.27	92.03
PCDD	15.26	5.46	2.87		**64.20**	**47.43**	**81.18**
PCDF	28.90	5.38	2.45		**81.40**	**54.46**	**91.53**
PCDD/F	44.16	10.84	5.32		**75.45**	**50.92**	**87.95**